

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002428**Date Inspected:** 13-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

New Tower Shop Bay 1:

The QA Inspector observed no welding or other contract work being performed at this location.

New Tower Shop Bay 2:

The QA Inspector randomly observed ZPMC welder Xia Yonglin ID Number 048882, utilizing the Submerged Arc Welding (SAW) Process in the 1G Position (Flat Groove) with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S, to weld the fill pass in Weld Joint (WJ) WSD1-SA107B/J-17B on Tower Skin Plate A Sub-Assembly SA107(W) piece marks p456(W) + p375(W) to p228(W). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 640 amps, 32.4 volts with a travel speed of 600 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Sun Bingfa ID Number 062046, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ ESD1-SA107B/J-16B, on Tower Skin Plate A Sub-Assembly SA107(W) piece marks p456(W) + p375(W) to

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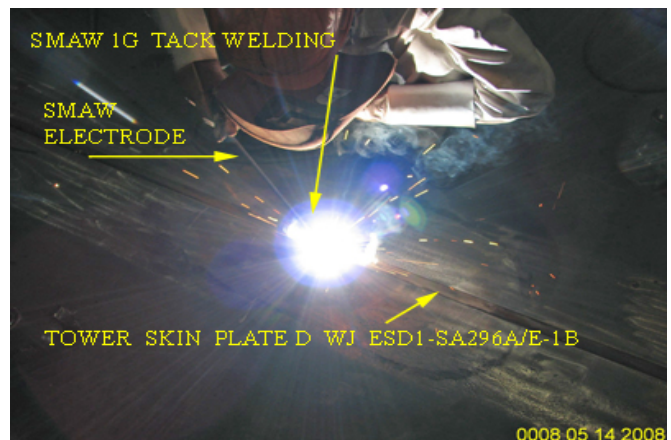
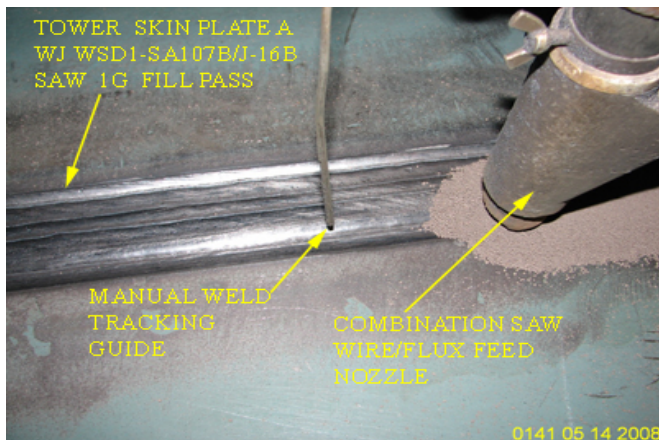
p228(W). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 646 amps, 32.5 volts with a travel speed of 600 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Zhai Qingshan ID Number 058026, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-P-2211-B-U3b, to tack weld the splice between piece marks SA296(E) and p968(E) in WJ ESD1-SA296A/E-1B on Tower Skin Plate A Sub-Assembly SA296(E). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photographs provide additional detail.

The QA Inspector randomly observed a ZPMC helper utilizing a grinder to blend tack welds in WJ ESD1-SA296A/E-1B prior to welding the root pass. The attached photograph provides additional detail.

New Tower Shop Bay 3:

The QA Inspector observed no welding or other contract work being performed at this location.

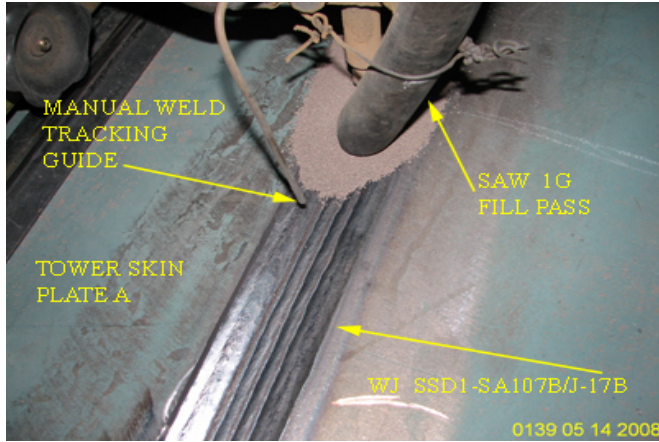


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### Summary of Conversations:

There were no relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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